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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/944,536	08/31/2001	Lee C. Moore	D/A0A45	3291
7590	12/11/2009		EXAMINER	
Patrick R. Roche, Esq. Fay, Sharpe, Fagan, Minnich & McKee, LLP 1100 Superior Avenue, 7th Floor Cleveland, OH 44114-2518			KOYAMA, KUMIKO C	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 09/944,536	<b>Applicant(s)</b> MOORE, LEE C.
	<b>Examiner</b> KUMIKO C. KOYAMA	<b>Art Unit</b> 2887

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If no period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(o).

#### Status

- 1) Responsive to communication(s) filed on 06 August 2009.  
 2a) This action is FINAL.      2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 2 and 6-8 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 2 and 6-8 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 31 August 2001 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO-1449)  
 Paper No(s)/Mail Date \_\_\_\_\_
- 4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_\_  
 5) Notice of Informal Patent Application  
 6) Other: \_\_\_\_\_

**DETAILED ACTION**

Amendment received on August 06, 2009 has been acknowledged.

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claim 2 is rejected under 35 U.S.C. 102(e) as being anticipated by Mao et al (US 6,546,385).

Mao discloses a device 402 that includes an optical scanner 404 and an optical character recognition module 408 for optically scanning text and/or data elements from a hard copy document 406 (col 5, lines 38-41). Such disclosure teaches scanning a printed version of the document to generate scan data and performing optical character recognition functions on the scan data to generate an electronic version of the document. Mao discloses a searching assistant 402 that can accept user input 422 such as via pen input 426 or keypad input 424 (col 6, lines 20-22). A user of the searching assistant 402 can search a hard copy document for specific data elements such as text and/or graphics (col 6, lines 22-25). Mao discloses that the user enters certain query words or search words for indexing, and the searching assistant 402 accepts the query words from manual entry via the user input 422 (col 7, lines 10-16). Such disclosure

teaches determining a sub-section delimiter definition including at least one delimiter characteristics, wherein determining a sub-section delimiter comprises a user indicating at least a text string. Mao discloses that the searching assistant 402 searches with the searching engine 410 (col 7, lines 16-17). Such disclosure teaches searching the electronic version of the document for one of the characters and objects corresponding to the defined sub-section delimiter. The searching assistant 402 displays a result of the search to the user, and then exits the searching operation (col 7, lines 18-21). Such displaying action of the search is considered as generating an index for the document with all found items corresponding to the sub-section delimiter occurrences because the invention displays a customized index geared toward a particular user.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mao in view of Kuga et al (US 5,276,616). The teachings of Mao have been discussed above.

Mao discloses displaying the created index and checking that the displayed index is correct.

However, Mao fails to teach correcting the index.

Kuga further discloses an index generating unit 6 including an index entry list generator 22 connected to text storage 20 for extracting index entries from the textual data, an index entry

storage 24 connected to index entry list generator 22 for storing the index entries outputted from the generator 22, and an index editor 26 for editing the index entries stored in index entry storage 24 based on the instructions from the input unit 2, which includes a keyboard (col 7, line 24) and for applying the edited index entries to printer 10. Such disclosure teaches checking and correcting the index.

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to integrate the teachings of Kuga to the teachings of Mao in order to ensure the accuracy of the index such that the index is accurately customized toward one user for the user's convenience.

5. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ouchi (US Patent Application Publication No. 2003/0156754 A1).

Mao discloses a device 402 that includes an optical scanner 404 and an optical character recognition module 408 for optically scanning text and/or data elements from a hard copy document 406 (col 5, lines 38-41). Such disclosure teaches scanning a printed version of the document to generate scan data and performing optical character recognition functions on the scan data to generate an electronic version of the document. Mao discloses a searching assistant 402 that can accept user input 422 such as via pen input 426 or keypad input 424 (col 6, lines 20-22). A user of the searching assistant 402 can search a hard copy document for specific data elements such as text and/or graphics (col 6, lines 22-25). Mao discloses that the user enters certain query words or search words for indexing, and the searching assistant 402 accepts the query words from manual entry via the user input 422 (col 7, lines 10-16). Such disclosure teaches determining a sub-section delimiter definition including at least one delimiter

characteristics, wherein determining a sub-section delimiter comprises a user indicating at least a text string. Mao discloses that the searching assistant 402 searches with the searching engine 410 (col 7, lines 16-17). Such disclosure teaches searching the electronic version of the document for one of the characters and objects corresponding to the defined sub-section delimiter. The searching assistant 402 displays a result of the search to the user, and then exits the searching operation (col 7, lines 18-21). Such displaying action of the search is considered as generating an index for the document with all found items corresponding to the sub-section delimiter occurrences because the invention displays a customized index geared toward a particular user.

Mao fails to teach that the sub-section delimiter is a title.

Ouchi discloses instructions for extracting a title (Paragraph [0022], lines 9-10) and the title extraction software is initiated by the user (Paragraph [0023], lines 1-2).

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to integrate the teachings of Ouchi to the teachings of Mao such that the user can specify a title to be searched such that the user can rapidly locate the beginning of a chapter or section that the user needs to look at.

6. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mao in view of Ouchi as applied to claim 7 above, and further in view of Palmer (US 6,002,798). The teachings of Mao as modified by Ouchi have been discussed above.

Mao as modified by Ouchi fail to teach displaying a plurality of document pages on a user interface, selecting at least one demarcation point on at least one of the plurality of pages; and using the at least one demarcation point as the defined sub-section delimiter.

Palmer discloses that when plural documents are retrieved, they are displayed in order of their score (col 8, lines 9-10). Such disclosure teaches displaying a plurality of document pages. Palmer also discloses that the operator may select whether to display ASCII text characters of OCR-processed text regions or document images of text regions. The operator may select the abstraction level at which the structural view is displayed (col 8, lines 25-30). The levels are, Structure Only, Titles, Retrieval Parameters, etc (col 8, lines 30-45). Such designation of the display level is considered as a demarcation point because the operator specifies which particular point of the document that needs to be displayed and only those sections are displayed accordingly.

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to integrate the teachings of Palmer to the teachings of Mao as modified by Ouchi such that if the user decides to change the display or section of the document to be displayed, the user can easily switch over to another section without modification to the program.

*Response to Arguments*

7. Applicant's arguments filed August 06, 2009 have been fully considered but they are not persuasive.

Applicant submits that Mao discloses a search for an already existing, and does not disclose or suggest generating an index for the document. However, the Examiner respectfully disagrees. The term "index" in claims appears to be very broad and there is no thorough definition of what conveyed in the term "index" in the claims. Even searching through the prior art, the word index is used in many different capacities. In this particular case, the Examiner

considers the index to be a customized index geared toward a particular user, as explained in the body of the rejection. In the prior art Mao, the user provides a search term such that a user designated or inputted term is search throughout the document, and at the end, the found items are displayed to the user for viewing. The list of found items or search results are considered to be an index, and therefore, the prior art teaches generating an index. This index is a user customized index such that the index is geared towards a user's request. Although the Applicant appears to disagree with this interpretation of "index," the Examiner believes that this interpretation is in accordance with a commonly known definition of "index." Merriam-Webster's Collegiate Dictionary defines index as "something that leads one to a particular fact or conclusion," "a list arranged usually in alphabetical order of some specified datum," "a list of items treated in a printed work that gives for each item that page number where it may be found," etc. Also, there is no where in claim, where the index cannot be customized to one particular person. Therefore, the Examiner believes that the prior art still meets the claimed invention.

Applicant discloses that Mai discloses displaying the created index and checking that the display index is correct without to any portion of Mao allegedly disclosing such subject matter. However, the Examiner respectfully disagrees because such displaying of the index is already taught in the explanation for claim 2.

Applicant submits that Ouchi does not disclose or suggest using the title as a delimiter or using characteristics of a selected title as delimiter characteristics. However, the Examiner respectfully disagrees. Ouchi specifically searches for a title and extracts title from a document. Ouchi teaches a process of actually determining and searching a title, and shows that a title specifically is able to be searched for. The Examiner understands that Mao is silent with regards

to a title search. However, in view of Ouchi, it would be obvious if a user decides to search for a title because Mao already teaches inputting a string of text, and searching for a title merely involves typing in the string of text that corresponds to the title. If a string of text can be inputted into a system, it is just a matter of different combination of character inputs that needs to be made in order to input a title. Therefore, the Examiner believes that Mao in view of Ouchi teaches designating a title as a delimiter and there is motivation is combine the two prior art.

With respect to claim 8, the Applicant submits that the cited portions of Mao and Ouchi are directed toward discussion of displaying documents or portions of documents, and are completely unrelated to making a selection of a demarcation point on at least one of the plurality of displayed pages. First of all, the Examiner would like to note that the teachings of demarcation point and the displaying of plurality of pages is taught by Palmer. The claimed recitation regarding making a selection on at least one of pages on the document is taught by Mao and Ouchi. Mao as modified by Ouchi already teaches the user inputs a search term and the search results is displayed. This is already explained by the Examiner above. Such teachings of Mao and Ouchi teaches making a selection of a point on at least a page of a document. The Examiner understands that Mao and Ouchi do not explicitly teach a demarcation point and displaying a plurality of pages. However, Palmer discloses a plurality of document pages are displayed, and the operator can select whether to display the text characters of OCR-processed text regions or document images of text regions. And further, the operator may select the abstraction level. These teachings of Palmer teaches a demarcation point and selecting a demarcation point on at least one of the plurality of pages. Mao, Ouchi and Palmer all related to a document processing, and it would have been obvious to one in ordinary skill in the art to combine these prior art and

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integrate teachings of one document processing to another document processing in order to enhance the technology for a better document processing. Therefore, the Examiner believes that Mao, Ouchi and Palmer teach the recited claims, and motivations exists.

Accordingly, the Examiner maintains the rejection, and this action is Final.

***Conclusion***

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KUMIKO C. KOYAMA whose telephone number is (571)272-2394. The examiner can normally be reached on Monday-Friday 8am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve Paik can be reached on 571-272-2404. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kumiko C. Koyama/  
Primary Examiner, Art Unit 2887